

EXAMINING THE IMPACT OF ACCESS TO HEALTHCARE INFORMATION IN PROVIDING SERVICE IN HOSPITAL LEVEL OF HORMOZGAN PROVINCE**Abstract**

Objective: Examining the impact of access to healthcare information in providing service in hospital level was performed in Hormozgan province.

Methodology: The study is applied in objective respect. The statistical population of this study includes managers and employees of private hospitals of Hormozgan province who are 3240 persons that based on Morgan sample content table, 380 persons were specified as research sample. The questionnaire has been adjusted based on 5-value Likert scale. For analysis of collected data, Pierson correlation coefficient test using SPSS software version 18 and structural equations approach (pathway analysis) using AMOS software version 20 has examined and tested the research hypotheses.

Findings: there is a positive and direct relation between access to healthcare information and providing services with correlation coefficient of 0.712. The results structural equation showed that access to healthcare information with pathway factor of 0.82 influences providing service.

Conclusion: therefore, with healthcare information it is suggested that topics relating to providing services to be noticed by authorities.

Keywords: healthcare information, providing service, hospital

Introduction

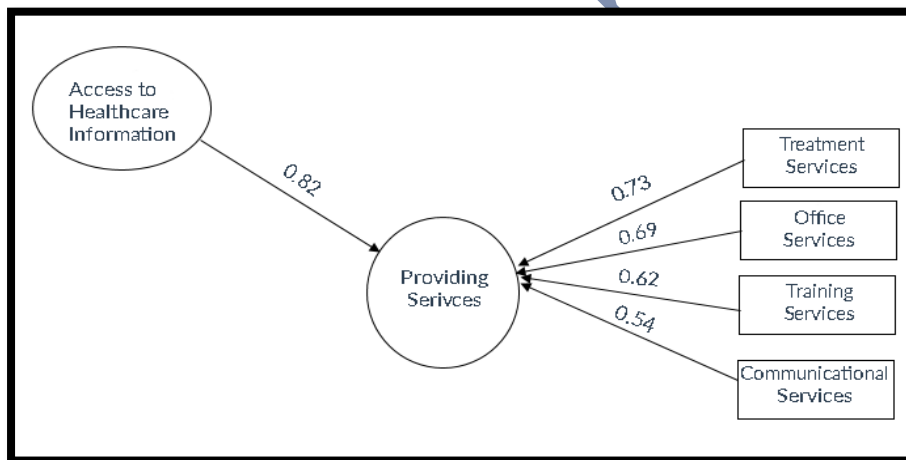
Healthcare management is a collection of knowledge and skill which secures access to health information for timely offering of cares and decision making in critical occasions for patients in various institutes based on special order and arrangement. Correct and accurate information for specifying complex and multiple occasions with which we are encountered today such as diseases and lesions, prevention and treatment, environment and society health is considerably critical and sensitive (Tavakoli, 2004). On the other hand, hospitals as one of the most important social organizations have a major role in improving the state health status and providing healthcare services and are one of the most sensitive organizations for correct managing of which information should be accurately collected and after monitoring and classifying and induction provided for all hospital decision makers especially its managers and directors in a suitable form and suitable time (Siamian, Ali Gonbadi, Nasiri, & Shahrabi, 2005). A health information system or hospital information system which is briefly called HIS includes a database and universal software for integrating information relating to the patient for sending and exchanging the patient comprehensive information between wards and other treatment centers for accelerating healthcare process of the patient, quality improvement, increasing satisfaction and reducing costs (Aghjani, 2002). In other words, hospital information system is a system which could cover all tasks and operation which are performed in the process of the patient treatment in various parts of a treatment center including diagnostic, treatment, office, financial and research and besides receiving and accurate recording of the patient identity and medical information, specifies the ability of displaying each action progress and the impact of that action on other treatment affairs of the patient and finally keep, retrieve, classify all information of the patient in the Electronic Patient Record and provide it for various elements of a state treatment system for supplying treatment objective (Hajavi, Moradi, & Sarbaz, 2005), hospital information system has been

designed for automatizing hospitals affairs like reporting the tests results, entering the physician orders, prescribing medicines, controlling the drugstore , central store , nutrition unit stock and so on. In hospital information system, an electronic record is formed for each patient so that it covers all hospital activities (including treatment, diagnostic, financial and so on) of the patient from reception to discharge. In this system, all treatment actions, medicinal orders and diagnostic services are sent through the system to clinics and Para clinics and even office centers such as accounting, drugstore, stores and other units and their response is received. Therefore, the time of beginning and end of all actions are specified and pursuable in the system. Information system is a system in which HIS information are stored comprehensively in a database and from there in the required time and place, information are available for the users in special forms(Lenz & Kuhn, 2001). It is for many years that industrial countries utilize this technology in the arena of healthcare, but implementing this system in hospitals of various regions of Iran indicates providing of cultural infrastructure, suitable technology for creating and complementing health systems according to world standards. In recent years, with fast improvement of technology, hospital information systems have taken a more novel form which has been noticed not only in management respect but from clinical view. Existence of equipment armed with clinical computer facilities like (MRI, CT scan, etc.) and also software designed especially for clinic and Para clinic sections and advanced medical communities use of such software in the domain of hospital information systems and using it in international communications and necessity of preserving privacy and privatization has caused this complex collection of information technology to progress toward integrated information architecture. In the bed of this architecture, standard molds like HL7 have been formed for responding the need of sharing information or helping in effectiveness of clinical processes trend and error reduction and beside it standards like Dicom have been created for medical pictography, management of medical picture information in software and medical equipment and so on(Francis & De Souza, 2000). The aim of hospital information system is supporting hospital activities in scientific, tactic and strategic levels. In other words, the aim of hospital information system is using computers and communicational means for collecting, storing, processing, reading out and establishing relation between patient care and office information in all hospital activities and fulfilling needs of all authorized system users. In university hospitals, supporting research and training are also among aims of hospital information system(Hajavi, Sarbaz, & Moradi, 2003). Hospital information system is a mechanized system of information and document management in hospitals. Regarding wide evolutions in medical technology and increasing of patients' expectations, an increasing need to using hospital information system has emerged in the hospital. In technology era and explosion of information in healthcare level, experts believe that in 21st century, those hospitals which lack hospital information system don't have anything to say and lack the ability to compete other hospitals. Hospital information system is a powerful information tool which can help hospital managers in the process of managing hospitals and making correct decisions and considerably increase the hospitals positive performance(Marzbani, 2008). This study aims to answer this question that whether there is any relation between access to healthcare information in providing service in hospital level of Hormozgan province?

Research methodology

The method of the present study is descriptive of survey type and the statistical population of this study includes all managers and employees of private hospitals of Hormozgan province who are 3240 persons that based on Morgan sample content table 380 persons were specified as research sample. Finally, after distribution of questionnaires, 372 questionnaires were returned. They were distributed among the population using simple random method. The assessment tool is questionnaire and based on combined theoretical framework, scholar made

	e	Of Variance	nt	ue	Of Variance	nt	ue	Variance	Percent
Treatment Factors	6.371	45.507	45.507	6.371	45.507	45.507	3.524	25.301	25.301
Office Factors	1.508	10.771	56.278	1.508	10.771	56.278	2.772	19.799	45.100
Training Factors	1.005	7.967	64.245	1.115	7.967	64.245	2.503	17.879	62.979
Communicational Factors	1.005	7.178	71.423	1.005	7.178	71.423	1.182	8.444	7.423



As it is shown in figure 1, the impact intensity of independent variable of access to healthcare information on dependent variable of providing services is 0.82. Fitness indicators are one of the most important stages of modeling and this criterion shows that whether the model represented by data confirms the research measuring model or not. The model fitness indicator has been shown in table 6-4.

Table 5- General fitness indicators of conceptual model and the research

Acceptable Fitness	Primary Model	Abbreviation	Name Of Indicator	Indicators Grouping
Greater Than 5%	21.97	X ²	Chi-Square Covered Level	Absolute Fitness Indicators
Gfi> 90%	0.91	Gfi	Fitness Goodness Indicator	
Agfi>90%	0.92	Agfi	Modified Fitness Goodness Indicator	
Higher Than 50%	0.91	Pnfi	Normalized Fitness Goodness Indicator	Frugal Fitness Indicators
Rmse<10%	0.062	Rmse	Estimation Error Mean Square Root	
The Rate Between 1-3	1.69	Cmin/Df	Normalized Chi-Square To Freedom Degree	

Discussion and conclusion:

The general aim of this study is to examine the impact of access to healthcare information in providing services in Hormozgan hospitals. Healthcare information is a mechanized system for managing information and document in the hospitals. Regarding the wide evolutions in the field of medical information technology and increasing patients' expectations, increasing need to using hospital information system has been created. Access to healthcare information is a powerful information tool which could help managers in the process of managing the hospital and making correct decisions and it considerably increases the hospitals performance. Inefficiency of manual methods of doing tasks, growth of research especially medical research across the world and fast increase of information volume, increasing of personnel specialized level, growing increase of healthcare costs, increasing of patients' expectations, necessity of medical centers and medical sciences specialists relation with each other are among the most important necessities and reasons of access to healthcare information. Access to healthcare information has many capabilities and added value and could create a revolution in healthcare services, and cause promotion of medical services quality, communication services, training services and office services in managing hospital. Internal and foreign studies confirm these favorable impacts. Therefore, optimal planning, triggering and utilizing of hospital information system are necessary and could change type and quality of providing healthcare services and relating research activities. Also, it should be pointed out that regarding increasing growth of science and technology in all sectors and organizations all over the world and also ample problems in the field of documenting patients information, such as losing information, lack of timely access to patient information and their health and treatment history, lack of access to patients information in various geographical regions and considering high volume of referrals, necessity of replacing electronic systems instead of paper systems in healthcare sector seems necessary. The studies have shown that regarding the performed surveys, standards have been designed so that electronic systems topic support creating structured data, nomination systems and standard classification, creating a database for storing information and evaluating and analyzing findings, preserving privacy and information security all of which are essential elements of creating health electronic record. All examined organizations relying on these standards, besides promoting processes of information management, medical records and securing services quality, also provide a suitable ground for reinforcing healthcare information system and creating health electronic records. These findings are consistent with the following studies: (Nopasand, M, & MH, 2016), (Kamrani, 2012), (Niroomand&Niroomand, 2015), (Farimpoung et.al, 2016). In

the study of (Nopasand et al., 2016), the results have shown that existence of hospital information system and its subsets causes the patient satisfaction and so promotion of hospital performance. (Kamrani, 2012) in his study showed that implementation has caused improvement of Bahrami children hospital organizational performance and hospital information system. (Niroomand&Niroomand, 2015) in a study has stated that one of indicators of healthcare development is existence of information system which follows various goals such as storing management, retrieving and analyzing information and facilitating research affairs and on the other hand technological changes have guided treatment centers to using the above information systems. For fulfilling clinical, managerial and legal information needs, managers have noticed development of computer files. (Farimpoung et.al, 2016) has addressed the impact of technology on value of creating cooperation in healthcare. Improvements occurred in technology, have enabled patients to be informed and have caused patients to play an active role in clinical contacts with physicians. The results showed that information before contact has a positive impact on improving service interaction and commitment to adaptation with medical instructions. This impact happens using interactions nature formation, improvement of patient and provider orientation and promoting participation in common decision making process. The concept of creating cooperation value in the study shows that service providers require using approaches of providing service so that it effectively utilizes the patient resources to create value in the format of cooperation. Therefore, information is one of valuable and major resources of managers of an organization. As human resources, primary materials and financial resources in the production process have a special role and value, information has a special value in the era of information and communication. Access to health information systems could help hospital managers and personnel in providing services for patients. Existence of information systems is one of indicators of healthcare development. Healthcare information whose main performance is establishing relation and integrating the patient data, plays a considerable role in providing services in Hormozgan hospitals.

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